Hydrologic Forecast Tenmile Creek

CONDITIONS 06/14/2020

Lewis & Clark County Water Quality Protection District



SUMMARY

Tenmile Creek reached nearly 300 CFS on May $21^{\rm st}$ in response to precipitation throughout the region and has been dropping steady since. The past week's high temperatures have accelerated snow-loss at higher elevations and regional Snotel stations are reporting very little snow remaining below 8,000'. Precipitation is expected for the early part of the week, particularly on T-W, which could cause local streams to rise and create short-term flooding conditions, particularly in low-lying areas and areas of poor drainage. Tenmile Creek is $\sim\!63$ CFS presently, and barring any extended or exceptional precipitation events, flows should remain below flood stage.

Residents should keep track of weather patterns for increasing temperature and precipitation events, particularly thunderstorms, which could change streamflows quickly, causing small creeks such as Tenmile Creek and Silver Creek to rise rapidly.

The following data and information are used to evaluate hydrologic conditions in the Tenmile Creek drainage.

- 1. **Streamflow** measured at Williams St USGS Stream Gauging Station west of the city of Helena. https://waterdata.usgs.gov/monitoring-location/06063000
- 2. **Snowpack** snow water equivalent (SWE) at the SNOTEL Stations Frohner Meadows, Rocker Peak, Nevada Ridge.

https://www.nwrfc.noaa.gov/snow/snowplot.cgi?FRHM8

https://www.nwrfc.noaa.gov/snow/snowplot.cgi?RKPM8

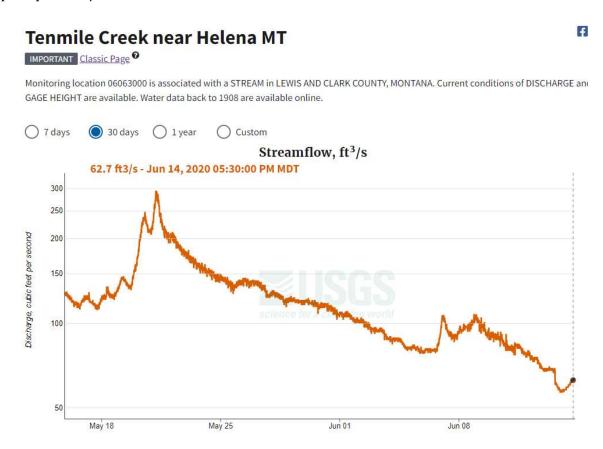
https://www.nwrfc.noaa.gov/snow/snowplot.cgi?NVRM8

3. Short-term Helena 5-day weather (**precipitation and temperature**) projection from the National Weather Service.

https://forecast.weather.gov/MapClick.php?lat=46.5924&lon=-112.0403#.XpoTqkZKjBQ

1. STREAMFLOW

Streamflow on Tenmile Creek over the past 30 days is shown below. Since the May 21^{st} precipitation peak, Tenmile Creek has been dropping steadily. The recent June 7^{th} - 9^{th} peaks are from precipitation/thunderstorms.



2. SNOWPACK (SWE)

SWE at Frohner Meadows (6,480'), Rocker Peak (8,000'), and Nevada Ridge (6,000') is gone. Significant snowmelt runoff is not expected.

3. WEATHER

Monday through next Friday... expect cooler temperatures and precipitation throughout the week with the greatest chance of precipitation being Tuesday into Wednesday, as a slow-moving upper level low-pressure system moves through the region. This event will bring snow at higher elevations and 1-3 inches of precipitation is possible in places.